EXECUTIVE SUMMARY

The Sacramento River Water Reliability Study (SRWRS) is being developed under the authorization of Public Law (PL) 106-554, Appendix D, Division B, Section 103, which directs the Secretary of the Interior to conduct a feasibility study for a Sacramento River diversion that is consistent with the WFA, dated April 24, 2000. On June 26, 2002, Placer County Water Agency (PCWA) signed a Memorandum of Agreement with Reclamation to share a minimum of 50 percent of the study cost. PCWA then entered into separate cost-sharing agreements with its third party cost-sharing partners: Sacramento Suburban Water District (SSWD), the City of Roseville (Roseville), and the City of Sacramento (Sacramento).

The goal of the SRWRS is to develop a water supply plan that is consistent with the Water Forum Agreement (WFA) objectives of pursuing a Sacramento River diversion to meet water supply needs of the Placer-Sacramento region and promoting ecosystem preservation along the lower American River. The results from the SRWRS will be used as the basis for seeking necessary approvals and permits from the responsible resource agencies to allow execution of necessary agreements and construction of the recommended water supply infrastructure. This **Interim Report** documents the preliminary findings of the study to date and identifies future steps of the SRWRS.

The SRWRS study area includes the Sacramento area north of the American River and east of the Sacramento River (see **Figure ES-1**). The American River watershed (or drainage basin) covers about 2,100 square miles northeast of the City of Sacramento and includes portions of Placer, El Dorado, and Sacramento counties. The American River is a tributary of Sacramento River. The Sacramento River watershed covers most northern California counties. Folsom Dam and Reservoir on the American River and Shasta Dam and Reservoir on the Sacramento River are Central Valley Project (CVP) storage facilities, owned and operated by the United States Department of Interior, Bureau of Reclamation (Reclamation).

STUDY DEVELOPMENT

The SRWRS will include a feasibility study and a joint Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for identified water supply alternatives as the basis for seeking necessary Biological Opinions and permits from the responsible regulatory agencies to allow execution of necessary agreements and construction of the recommended water supply infrastructure. Development of the SRWRS will be consistent with the following principles:

- Satisfying requirements stipulated in PL 106-554 to complete a feasibility study for a Sacramento River diversion that is consistent with the Water Forum Agreement and includes the following components: 1) development of a range of reasonable options, 2) an environmental evaluation, and 3) consultation with federal and state resource management agencies regarding potential impacts and mitigation measures. Furthermore, Congress requires the SRWRS to be developed in coordination with the California Federal Bay-Delta Program (CALFED).
- Observing existing applicable laws, regulations, water rights, contracts and legal agreements, and federal planning guidelines, including, but not limited to, National Environmental Protection Act (NEPA), federal planning guidelines such as *Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies,* California Environmental

Quality Act (CEQA), California water laws, and obligations of the cost-sharing partners in their charters and as defined in California laws.

- Minimizing overall impact on the environment to the extent feasible, being cost-effective, and complementing and enhancing the overall reliability of the Placer-Sacramento region's water supply system through increased interconnectivity and source redundancy.

The SRWRS plan will be consistent with the WFA in pursuing a Sacramento River diversion to accomplish the following objectives envisioned in the agreement: 1) meeting the needs of planned future growth within the Placer-Sacramento region, 2) maintaining a reliable water supply while reducing diversions of surface water from the American River in future dry years to preserve the river ecosystem, and 3) enhancing groundwater conjunctive management to help sustain the quality and availability of groundwater for the future.

WATER DELIVERY QUANTITIES

The SRWRS cost-sharing partners (PCWA, SSWD, Roseville, and Sacramento) have identified their long-term needs for additional water supplies to meet growing water supply demands and reliability objectives in their respective service areas (see **Appendix A** for details). **Table ES-1** below presents a summary of requests for additional surface water diversion and treatment capacity to balance projected 2030 demand and supply and enhance water supply reliability.

Table ES-1. Water Delivery Quantities Considered in the SRWRS

Water Purveyor	Requested Maximum Annual Additional Water Deliveries (AF)	Source	Type of Use	Requested Treatment Capacities (mgd)	Purpose of Requested Treatment Capacities
PCWA	35,000	CVP	M&I	65	Max-day demand
SSWD	29,000[1]	MFP	M&I	15	Reliability and redundancy
Roseville	7,100[2]	MFP	M&I	10	Max-day demand
Sacramento	58,000[3]	Water rights, water wheeling requests	M&I	165	Max-day demand (155 mgd) and redundancy (10 mgd)
Total	129,100			255	

Key:
AF – acre-feet
MFP – Middle Fork Project
M&I - municipal and industrial
max-day - maximum-day
mgd – million gallons per day

[1] For Water Forum average, drier, and driest years only; the WFA allows SSWD to exercise this entitlement in Water Forum wet years using diversion from the American River.
[2] Roseville only considers additional diversions from a river other than the American River.
[3] The WFA does not establish a volumetric limitation for Sacramento's total diversion; the estimated additional water supply to meet its projected demand is about 58,000 AF per year, based on the difference between the projected demand and the simulated average diversion for Sacramento that could be realized using then-existing diversion facilities on the American and Sacramento rivers. However, Sacramento could divert up to 81,800 AF per year under its water rights on the Sacramento River at a new diversion by reducing the diversion under its Sacramento River water rights at its existing Sacramento River Water Treatment Plant downstream of the confluence with the American River.

WATER FORUM AGREEMENT AND A SACRAMENTO RIVER DIVERSION

Two key documents form the cornerstone of the SRWRS: (1) Reclamation's American River Water Resources Investigation (ARWRI), which includes an EIS completed in September 1997, and (2) the January 2000 WFA, which includes an EIR certified in November 1999.

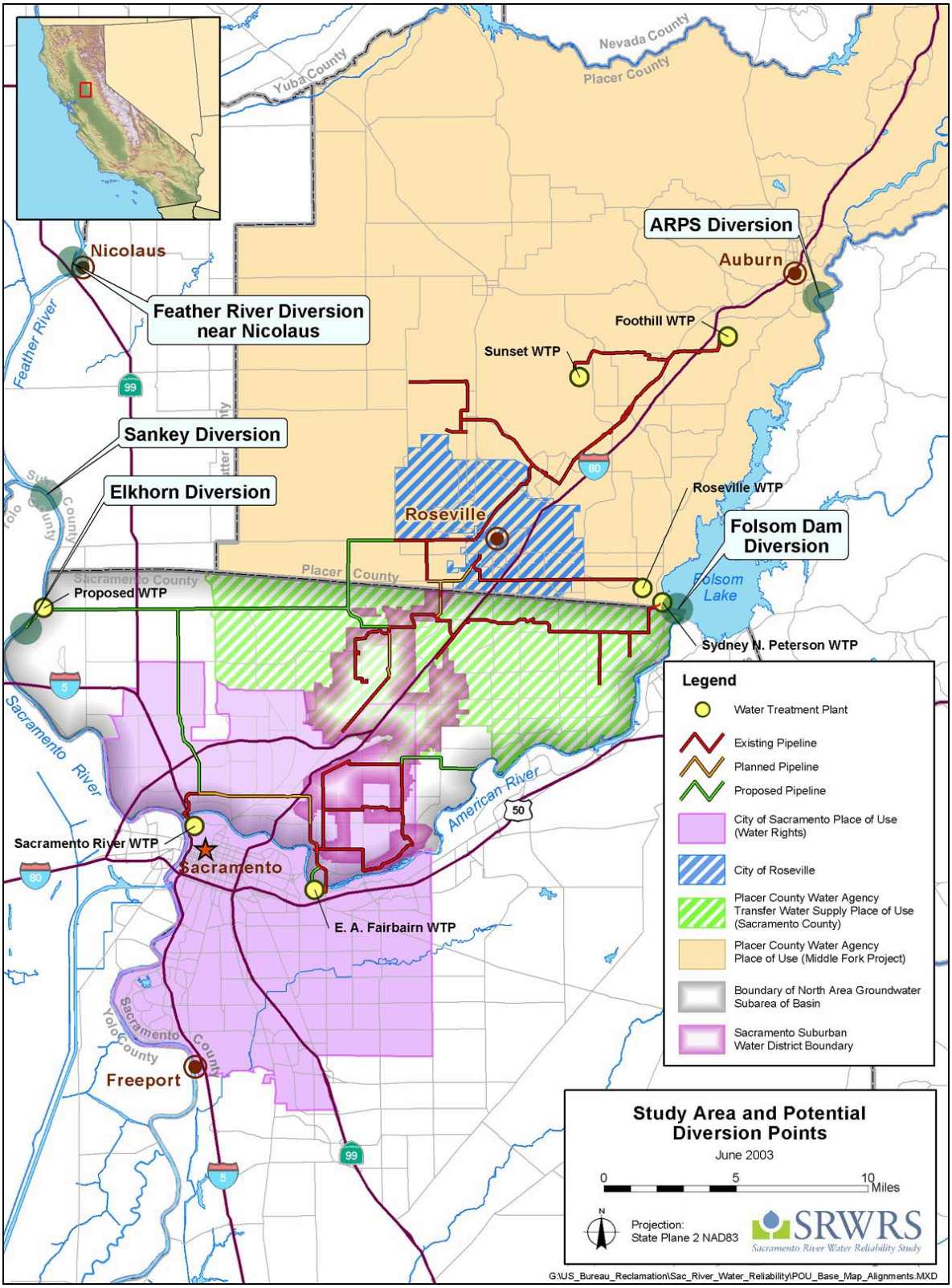

Figure ES-1. SRWRS Study Area and Potential Diversion Points

Both the ARWRI and WFA identify increased water supply needs resulting from planned growth in Placer and Sacramento counties, and recognize the importance of preserving the lower American River for its fishery, wildlife, recreational, and aesthetic values. The ARWRI identifies an environmentally preferred alternative to meet projected demands, which includes additional surface water diversions from the American, Feather, and Sacramento rivers and regional conjunctive management.

A Sacramento River diversion is a key component of the WFA's strategy to provide a safe and reliable water supply in the Sacramento/Placer county region while preserving the fishery, wildlife, and aesthetic values of the lower American River. This strategy supports and facilitates regional conjunctive management that is consistent with the environmentally preferred alternative of ARWRI.

Diversions from the Sacramento River Anticipated in the Water Forum Agreement

To implement the objective of preserving the lower American River, the WFA signatories, including SRWRS cost-sharing partners (PCWA, SSWD,[1] Roseville, and Sacramento), agreed on a set of year-type[2] dependent limitations on diversion from the American River, provided all required conditions were satisfied.

Affected diversions of SRWRS cost-sharing partners under their water rights and contract entitlements include the following: 1) PCWA's Central Valley Project (CVP) contract delivery of up to 35,000 AF per year, and up to 500 AF per year of water right diversion from its Middle Fork Project (MFP), 2) SSWD's water contract delivery of 29,000 AF per year from PCWA's MFP in non-wet years (i.e., "below Hodge," when March-through-November unimpaired flow to Folsom Lake is below 1.6 million AF), 3) Roseville's water contract delivery of up to 7,100 AF from either CVP or PCWA's MFP, and 4) A portion of Sacramento's water-righted diversion from the American River at its Fairbairn Water Treatment Plant (WTP). The WFA limitations provide that up to 100 million gallon per day (mgd), or 155 cubic feet per second (cfs), of diversion from the American River could be forgone during summer months when peak demand occurs.[3]

The aforementioned limitations on diversions from the American River for PCWA, SSWD, and Sacramento were negotiated on the basis that these water purveyors would be able to divert the forgone amount from a future diversion on the Sacramento River. Currently, PCWA and SSWD lack access to diversions on the Sacramento River or exchange agreements for such diversions. Similarly, Sacramento needs adequate diversion capacity on the Sacramento River to recover the forgone diversion at its Fairbairn WTP and provide surface water for retail, wholesale, and wheeling services to the region on a maximum-day (max-day) basis.

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[1] SSWD was formed in 2002 through consolidation of the former Arcade Water District (AWD) and the former Northridge Water District (NWD). NWD has a water sale agreement with PCWA for 29,000 AF per year of MFP water used in a groundwater stabilization program. In 2000, as part of the WFA, NWD entered into a Purveyor Specific Agreement (PSA) containing provisions for delivery of 29,000 AF per year from PCWA's MFP. After the consolidation, these provisions were applied to the Northridge service subarea of SSWD. AWD was not a WFA signatory. Currently, SSWD has a draft consolidated Purveyor Specific Agreement under review by the Water Forum Successor Effort.

[2] The WFA defines year-types based on the cumulative amount of March-through-November unimpaired inflow to Folsom Lake: wet (above 1,600,000 AF), average (between 1,600,000 and 950,000 AF), drier (between 950,000 and 400,000 AF), and driest (below 400,000 AF).

[3] The resulting quantity varies by hydrologic condition, precluding easy quantification of potential effect of these limitations.

Potential Impacts to the Region Without a Sacramento River Diversion

If the WFA were implemented without a Sacramento River diversion, and if the signatories observe the limitations on diversions from the American River, the following consequences would affect the region:

- Significant projected unmet demands resulting from existing beneficial uses and planned growth.
- Significant reductions in surface water delivery to agricultural users in the PCWA service area to meet projected unmet demand.
- Significant groundwater impacts to meet the projected unmet demand in the PCWA and Roseville service areas.
- Significant loss of in-lieu groundwater recharge opportunities for regional conjunctive management in Sacramento-Placer counties to meet projected unmet demands.

Loss of the in-lieu recharge opportunity for conjunctive management combined with the current overdraft in the groundwater basin in the Placer-Sacramento region would result in additional depletion, increasing the potential of water quality deterioration and permanent loss of usable groundwater aquifer. Not only would the conjunctive management envisioned by the WFA be jeopardized, regional water supplies would become increasing unreliable as a result of depleting the supplemental water supply. The potential breakdown of one of the two Water Forum co-equal objectives, providing adequate regional water supply reliability, could also significantly affect implementation of WFA strategies for the other co-equal objective of preserving the ecosystem along the lower American River.

ALTERNATIVES UNDER CONSIDERATION

Each alternative identified for the SRWRS will include a plan for operating a package of water supply infrastructure components to meet water supply needs of the cost-sharing partners. The infrastructure components include new or expanded diversion(s) from the Sacramento, Feather, or American rivers, and new or expanded water treatment and pumping facilities, storage tanks, and major transmission and distribution pipelines.

The alternatives currently under consideration in the SRWRS (see **Figure ES-1**) include the proposed project with joint diversion and treatment facilities for all cost-sharing partners and four alternatives. For these four alternatives, the partners may share facilities to a greater or lesser degree. Through a public scoping process and continued planning, engineering and environmental studies, the SRWRS will add, remove, and modify alternatives for further study.

Proposed Project: Elkhorn Diversion Alternative

The proposed project encompasses constructing a joint diversion from the Sacramento River and treatment facilities to serve the cost-sharing partners. The diversion facility would consist of expanding the existing Elkhorn Diversion owned by NMWC and located on the east bank of the Sacramento River, upstream of the mouth of the American River at approximately river mile 73.3, or constructing a new diversion near the existing Elkhorn Diversion. The proposed project would have a total discharge capacity of 345 cfs. Raw water would be lifted from the pump station to an 84-inch pipeline through which it would be conveyed to a new WTP. Treated water from the new WTP would be conveyed to serve SSWD via a transmission line that would connect to the service areas of the cost-sharing partners.

Implementing a Sacramento River diversion for the cost-sharing partners would require a change in the point of diversion for PCWA's CVP contract and for Sacramento's Sacramento River water right permit, and an

exchange agreement between Reclamation and PCWA for SSWD and Roseville diversions under their contract entitlements from PCWA's MFP.

Sankey Diversion Alternative

A Sankey Diversion alternative assumes that PCWA, SSWD, and Roseville would divert water from the Sacramento River near the confluence of the Sacramento River and the Natomas Cross Canal and build separate treatment, storage, and transmission facilities to meet their needs. This diversion would be located at or near the second diversion that NMWC is developing under its CALFED-supported American Basin Fish Screen and Habitat Improvement Project. Sacramento would use groundwater to meet projected unmet demand or would divert separately from the Sacramento River at the Elkhorn site, and construct its own treatment and transmission facilities to serve its needs.

Feather River Diversion Alternative

A Feather River alternative assumes that PCWA, SSWD, and Roseville would divert water from the Feather River near Nicolaus and build separate treatment, storage, and transmission facilities to meet their needs. The CVP would not be able to supply water directly to any diversion location on the Feather River, and thus a further agreement with the SWP and possibly a modification to the Cooperative Operation Agreement would be required for this alternative.

Sacramento would use groundwater to meet projected unmet demand or would divert separately from the Sacramento River at the Elkhorn site, and construct its own treatment and transmission facilities to serve its needs.

American River Pump Station Alternative

An American River Pump Station alternative assumes that PCWA would expand its American River Pump Station near Auburn and construct new treatment and transmission facilities to serve its needs. The CVP would not be able to provide a reliable water supply to PCWA at this location and thus, PCWA would divert from its MFP water rights. Reclamation would need to reassign PCWA CVP contract entitlement to MFP water sale contractors who divert water at Folsom Dam (SSWD, Roseville, or SJWD).

SSWD would divert from the existing SJWD diversion facilities at Folsom Dam. Roseville would increase use of groundwater to satisfy its needs in this alternative, but would have no additional surface water diversions. Sacramento would use groundwater to meet projected unmet demand or would divert separately from the Sacramento River at the Elkhorn site, and construct its own treatment and transmission facilities to serve its needs.

Folsom Dam Alternative

A Folsom Dam alternative assumes that PCWA and SSWD would use the existing or expanded diversion, treatment, and transmission facilities of SJWD at Folsom Dam. Roseville would increase use of groundwater to satisfy its needs in this alternative, but not have any additional surface water diversions. Sacramento would use groundwater to meet projected unmet demand or would divert separately from the Sacramento River at the Elkhorn site, and construct its own treatment and transmission facilities to serve its needs.

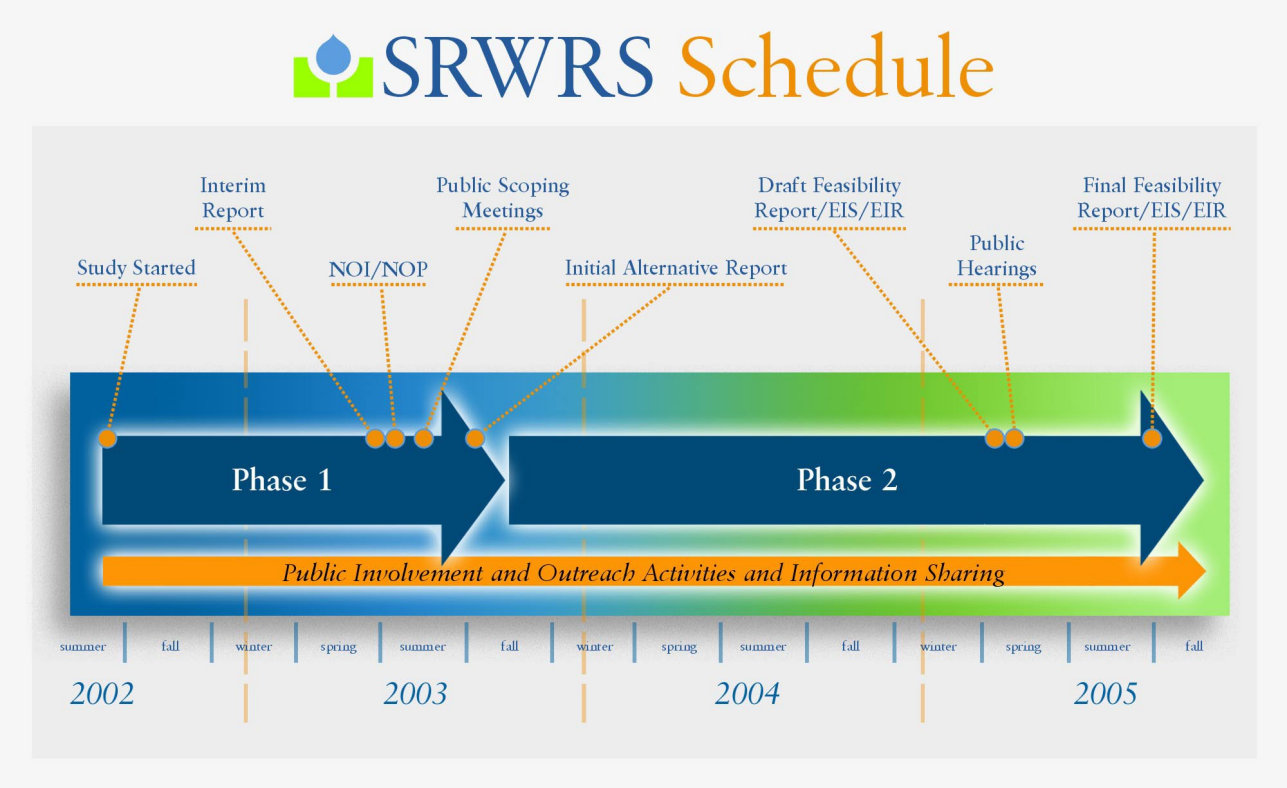
NEXT STEPS OF SRWRS DEVELOPMENT

The SRWRS development includes four phases: (1) Initial Investigation Phase; (2) Initial Plans Phase; (3) Alternative Plans Phase; and (4) Recommended Plan Phase. This Interim Report summarized the findings in the Initial Investigation Phase, and the SRWRS is currently in the Initial Plan Phase of study development. Tasks to be performed during this phase include the following:

- Initializing public scoping process including issuing the Notice of Intent/Notice of Preparation (NOI/NOP) for the preparation of the EIS/EIR.
- Developing preliminary alternatives.
- Performing initial screening of preliminary alternatives.
- Initializing agency coordination and consultation.
- Continuing public involvement efforts.

Figure ES-2 shows the tentative SRWRS schedule for completing the feasibility study and environmental documentation. The schedule is subject to revision to reflect progress in study development and agency consultation.

Figure ES-2. Tentative Schedule for SRWRS Development



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